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| 10/807,591 | 03/24/2004 | Yasushi Akiyama | 40138/00101 | 3664 |

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EXAMINER

FLOOD, MICHELE C

| ART UNIT | PAPER NUMBER |
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1654

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/807,591 | Applicant(s) AKIYAMA ET AL. | |
| | Examiner Michele Flood | Art Unit 1654 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification/Abstract

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

In the instant case, Applicant should avoid the delete the phrase, "The purpose of the present invention is to provide", from the first line of the abstract, and add A.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All of the claims are made vague and indefinite by the recitation of "*Pynoporus coccineus*" because the genus species name is not recognized in the art. At present, the claims are unsearchable as no genus species with the prescribed name was found searchable. It appears that the term "*Pynoporus coccineus*" is a misspelling of *Pycnopus coccineus*. Appropriate correction is required, if the assumption is true. If not, the examiner's preliminary analysis and search demonstrates that the claimed subject matter cannot be adequately searched by class or keyword among patents and typical sources of non-patent literature.

All other cited claims depend directly or indirectly from rejected claims and are, therefore, also, rejected under U.S.C. 112, second paragraph for the reasons set forth above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Ishibashi et al. (N), Tsuchiya et al. (*A) and Kisaki et al. (O)

Applicant claims a deodorizing agent comprising a plant derived deodorant component and at least one Basidiomycete selected from a group consisting of *Coriolus hirsutus*, *Coriolus verisicolor*, *Pynoporus coccineus*, *Phelebia radiata*, *Agaricus bisporus*, *Armillariella mellea*, *Lentinus edodes*, *Lenzites betulina*, *Daedalea dickinsii*, and claim-designated species of *Trametes*. Applicant further claims the deodorizer agent in claim 1, wherein said Basidiomycetes is at least one of a fungus body of the basidiomycete and a carophore of the basidiomycete; and, wherein said plant derived deodorant component is at least one plant extract selected from a group consisting of red alga plant, brown alga plant, gymnosperm and angiosperm. Applicant further claims the deodorizer agent in claim 2, wherein said plant derived deodorant component is at least one plant extract selected from a group consisting of red alga plant, brown alga plant, gymnosperm and angiosperm. Applicant claims a composition for the mouth cavity comprising a deodorizer agent including a plant derived deodorant compound and at least one claim-designated Basidiomycete. Applicant claims a food composition comprising a deodorizer agent including a plant derived deodorant compound and at least one claim-designated Basidiomycete. Applicant claims a deodorizing composition comprising a deodorizer agent including a plant derived deodorant compound and at least one claim-designated Basidiomycete.

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Ishibashi teaches a deodorizer comprising an extract of fruit-bodies of *Agaricus bisporus* and a perfume derived from fruit, on page 6, lines 20-31. The composition taught by Ishibashi can be used as an effective deodorizing agent for oral intake, which serves as a mouth deodorizer, and which can be used in foods.

Tsuchiya teaches deodorizing compositions comprising an oxidoreductase in combination with a mediator for the reduction of malodour, such as an oral care composition, dentrifices, hygiene products, and food products. See Column 3, lines 16-34. Also see Column 10, line 63 to Column 11, line 34. The oxidoreductase component, e.g., laccases, comprising the composition taught by Tsuchiya is derived from various strains of Basidiomycete, including *Polysporus pinsitus* (also called *Trametes villosa*) or *Polysporus versicolor* or strain of *Lentinus*, *Phlebia*, e.g., *Phlebia radiata*, *Coriolus* sp., e.g., *Coriolus hirsitus*. See Column 4, lines 50-63. In Column 5, lines 39-51, Tsuchiya further teaches oxidoreductase components obtained from red sea-weed *Chondrus crispus* and *Iridophycus flaccidum* that are used in the making of the referenced compositions. In Column 6, line 5 to Column 7, line 28, other mediator components used in the making of the referenced compositions are exemplified. In column 19, lines 40-62, Tsuchiya teaches compositions comprising laccase in combination with mediators, such as chlorogenic acid, syringaldehyde, methylsyringate, and Oolong tea extract. Also see patent claims, which are directed to a deodorizing composition/agent, a oral care product, a food product and hygiene product comprising the claim-designated ingredients.

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Kisaki teaches a deodorizing composition/agent comprising an extract of a Basidiomycetes, *e.g.*, *Armillariella mellea*, *Lentinus edodes*, and *Agaricus bisporus*, and extracts of plants or extracts from edible fruits. Kisaki does not expressly teach the referenced composition as a food composition. However, the composition taught by Kisaki comprises the one and the same ingredients comprising the composition instantly claimed by Applicant. Therefore, a food composition is inherent to the composition taught by Kisaki. Moreover, there is nothing contained therein the referenced composition to preclude use of the Kisaki composition as a food composition.

The references anticipate the claimed subject matter.

Claims 5-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu (P).

Applicant's claimed invention was set forth above.

Wu teaches a food composition comprising roe powder, wolfberry fruit and ginseng; and, wherein *Lentinus edodes*, capsaicin and salt are added to render the composition fragrant.

The reference anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. (*A) in view of Masaaki et al. (Q, translation of foreign patent provided herein) and Aaslyng et al. (B).

Applicant's claimed invention was set forth above.

The teachings of Tsuchiya are set forth above. Tsuchiya teaches the instantly claimed invention except for wherein the composition comprises at least one Basidiomycete selected from various recited claim-designated genus-species of Basidiomycete. However, it would have been obvious to one of ordinary skill in the art to add and/or replace the Basidiomycete taught with any of the claim-designated Basidiomycetes because Masaaki teaches laccase derived from *Pycnoporus coccineus* (see Abstract); Aaslyng teaches laccase derived from *Polyporus pinsitus* (also known as *Trametes pinsitus*) or *Polysporus versicolor* (also known as *Trametes versicolor*) or *Phlebia radiata* or *Coriolus hirsitus* (also known as *Trametes hirsitus*), in Column 5, lines 16-53. At the time the invention was made, one of ordinary skill in the art would have been motivated and one would have had a reasonable expectation of success to replace the laccase taught by Tsuchiya with any of the fungal-derived laccases taught by Masaaki and Aaslyng to provide the instantly claimed invention because it is *prima facie* obvious to substitute the same ingredient, one for the other, even though the source of the ingredient is different, since each ingredient would have the same functional effect. Thus, the instantly claimed invention would have been deemed no more than the replacement of one laccase for another laccase, wherein the sources of

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the laccases are different but the functional effect is one and the same, as the claimed invention is nothing more than an arbitrary matter of experimental design choice.

Accordingly, the claimed invention was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

* Applicant is advised that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Should you receive inquiries about the use of the Office's PAIR system, applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Flood whose telephone number is 571-272-0964. The examiner can normally be reached on 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHELE FLOOD
PRIMARY EXAMINER

MCF

February 28, 2005